

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-3 (Canceled)

Claim 4 (Previously Presented)

The substrate processing apparatus of claim 9, wherein
a central area of said substrate-facing surface which is faced with an approximately central portion of said substrate is a flat surface, and a peripheral edge area of said substrate-facing surface which is faced with a peripheral edge of said substrate is an angled surface which becomes closer to said substrate with a distance toward a peripheral edge of said substrate-facing surface.

Claims 5-8 (Canceled)

Claim 9 (Currently Amended)

A substrate processing apparatus wherein a processing liquid is supplied to one major surface of a substrate and said one major surface is subjected to predetermined substrate processing said substrate being provided with a notch which indicates an orientation at a peripheral edge, a radial width of the notch being predetermined, comprising:

an atmosphere blocking member which is faced with other major surface of said substrate and that is away from said substrate; and

a gas supplying unit which supplies an atmosphere gas to a space which is created between said atmosphere blocking member and said substrate,

wherein a substrate-facing surface of said atmosphere blocking member which is faced with the other major surface of said substrate becomes closer to the other major surface of said substrate with a distance toward a peripheral edge of said atmosphere blocking member,

said substrate-facing surface of said atmosphere blocking member has a radius which is

smaller in plan view than a radius that of said substrate by the radial width of the notch and said atmosphere blocking member is so constructed and arranged that a peripheral edge area of said substrate-facing surface thereof is not exposed around said substrate through the notch, and

said substrate processing apparatus further comprises three or more support members which are disposed at the peripheral edge of said atmosphere blocking member, abut on an edge surface of said substrate and accordingly support said substrate.

Claims 10-46 (Canceled)

Claim 47 (Previously Presented)

The substrate processing apparatus of claim 9, further comprising rotation means which rotates said substrate to which said processing liquid is supplied.

Claim 48 (Previously Presented)

The substrate processing apparatus of claim 47, wherein said rotation means rotates said atmosphere blocking member together with said substrate.

Claim 49 (Canceled)

Claim 50 (Previously Presented)

The substrate processing apparatus of claim 9, wherein each one of said support members comprises a contact surface which comes into a line contact with the edge surface of said substrate and supports said substrate.

Claim 51 (Previously Presented)

The substrate processing apparatus of claim 50, wherein a width of said contact surface is approximately the same as a width of a portion of said line contact.

Claim 52 (Previously Presented)

The substrate processing apparatus of claim 50, wherein a width of each one of said support members along a direction of said line contact becomes narrower with a distance away from said substrate or remains the same.

Claim 53 (Previously Presented)

A substrate processing system, comprising: a processing unit whose structure is the same as that of the substrate processing apparatus of claim 9; and
a transportation unit which transports substrates to said processing unit.

Claim 54 (Previously Presented)

The substrate processing system of claim 53, further comprising a reversing unit which reverses substrates.

Claim 55 (Currently Amended)

A substrate processing apparatus wherein a processing liquid is supplied to one major surface of a substrate and said one major surface is subjected to predetermined substrate processing said substrate being provided with a notch which indicates an orientation at a peripheral edge, a radial width of the notch being predetermined, comprising:

a processing liquid supply nozzle which supplies said processing liquid only to said one major surface of said substrate;

an atmosphere blocking member which has a shape of a disk and which is faced with other major surface of said substrate and that is away from said substrate; and

a gas supplying unit which supplies an atmosphere gas to a space which is created between said atmosphere blocking member and said substrate,

wherein a substrate-facing surface of said atmosphere blocking member which is faced with the other major surface of said substrate becomes closer to said substrate with a distance toward a peripheral edge of said atmosphere blocking member over the entire circumference of said atmosphere blocking member, and

said substrate-facing surface of said atmosphere blocking member ~~has a radius which~~ is smaller in plan view than ~~a radius that~~ of said substrate by the radial width of the notch and said atmosphere blocking member is so constructed and arranged that a peripheral edge area of said substrate-facing surface thereof is not exposed around said substrate through the notch.

Claims 56-58 (Canceled)

Claim 59 (Currently Amended)

In combination, a substrate processing apparatus and a substrate, wherein a processing liquid is supplied to one major surface of a substrate for a predetermined substrate processing, comprising:

three or more support members disposed in said processing apparatus, which abut a peripheral edge of said substrate and accordingly support said substrate;

said substrate having a notch at said peripheral edge of said substrate;

an atmosphere blocking member which faces another major surface of said substrate and is spaced away from said substrate;

said atmosphere blocking member having a radius which is smaller than a radius of said substrate by a radial width of a notch at a peripheral edge of said substrate, and is so constructed and arranged that a peripheral edge area thereof is not exposed around said substrate through the notch;

wherein a substrate-facing surface of said atmosphere blocking member which faces the other major surface of said substrate becomes closer to the other major surface of said substrate with a distance toward said peripheral edge of said atmosphere blocking member;

said substrate-facing surface of said atmosphere blocking member is smaller in plan view than said substrate by a radial width of a notch at a peripheral edge of said substrate, and said atmosphere blocking member is so constructed and arranged that a peripheral edge area of said substrate-facing surface thereof is not exposed around said substrate through the notch;

said three or more support members being disposed at a peripheral edge of said atmosphere blocking member; and

a gas supplying unit which supplies an atmosphere gas to a space which is created between said atmosphere blocking member and said substrate.

Claim 60 (Previously Presented)

The combination of claim 59, whereby the atmosphere blocking member prevents a mist from passing through said notch from said one major surface of said substrate, to said other major surface of said substrate.

Claim 61 (Previously Presented)

The combination of claim 59, wherein said atmosphere blocking member and said notched substrate cooperate to prevent a mist generated by liquid processing of said one major surface of said substrate, from passing through said notch and reaching said other major surface of said substrate.